

WHAT IS CLAIMED IS:

1 1. A method for mapping disparate data objects from multiple data sources into a single,
2 reusable software component accessible to a software application performed by a computer, for
3 integrated access to the disparate data objects generated dynamically by or contained in multiple
4 data sources stored in at least one electronic storage device coupled to the computer, the method
5 comprising the following steps:

6 (a) for a software application, identifying data objects for mapping;

7 (b) employing an information integration software facility for connecting to data sources
8 of the data objects and registering the data objects with the information integration software
9 facility;

10 (c) using the information integration software facility for creating a single virtual data
11 object consolidating multiple attributes from the registered data objects;

12 (d) for the software application, establishing a connection to the information integration
13 software facility for referencing the virtual data object; and

14 (e) wrapping access to the virtual data object into a reusable software component
15 accessible directly from the software application.

1 2. The method according to claim 1, wherein the information integration software facility
2 having access to multiple data sources, being chosen from a group comprising databases, files
3 and spreadsheets, containing or dynamically generating data from different hardware systems
4 and possibly storing data in different formats.

1 3. The method according to claim 1, wherein the information integration software facility
2 being chosen from a group comprising a multi-database server, a federated data server and an
3 information integration server.

1 4. The method according to claim 1, wherein the software application accessing the reusable
2 software component within a single unit of work.

1 5. The method according to claim 1, wherein the virtual data object being mapped into an
2 entity bean having attributes spanning multiple data sources.

1 6. The method according to claim 5, wherein the entity bean being a container-managed
2 persistence entity bean.

1 7. The method according to claim 1, wherein the software application including an
2 Enterprise JavaBeans (EJB) application.

1 8. The method according to claim 1, wherein the virtual data object being accessed from a
2 group comprising Java servlets, Java Server Pages (JSPs) and Web Services.

1 9. An apparatus for mapping disparate data objects from multiple data sources into a single,
2 reusable software component accessible to a software application performed by a computer,
3 comprising:
4 a computer coupled to at least one electronic storage device for integrated access to
5 disparate data objects generated dynamically by or contained in multiple data sources;
6 programming means, performed by the computer, for identifying data objects for
7 mapping;
8 an information integration software facility for connecting to data sources of the data
9 objects and registering the data objects with the information integration software facility;
10 means, performed by the computer, for using the information integration software
11 facility for creating a single virtual data object consolidating multiple attributes from the
12 registered data objects;
13 means, performed by the computer, for establishing a connection to the information
14 integration software facility for referencing the virtual data object; and
15 means, performed by the computer, for wrapping access to the virtual data object into a
16 reusable software component accessible directly from the software application.

1 10. The apparatus according to claim 9, wherein the information integration software facility
2 having access to multiple data sources, being chosen from a group comprising databases, files
3 and spreadsheets, containing or dynamically generating data from different hardware systems
4 and possibly storing data in different formats.

1 11. The apparatus according to claim 9, wherein the information integration software facility
2 being chosen from a group comprising a multi-database server, a federated data server and an
3 information integration server.

1 12. The apparatus according to claim 9, wherein the software application accessing the
2 reusable software component within a single unit of work.

1 13. The apparatus according to claim 9, wherein the virtual data object being mapped into an
2 entity bean having attributes spanning multiple data sources.

1 14. The apparatus according to claim 13, wherein the entity bean being a container-managed
2 persistence entity bean.

1 15. The apparatus according to claim 9, wherein the software application including an
2 Enterprise JavaBeans (EJB) application.

1 16. The apparatus according to claim 9, wherein the virtual data object being accessed from a
2 group comprising Java servlets, Java Server Pages (JSPs) and Web Services.

1 17. A program storage device readable by a computer tangibly embodying a program of

instructions executable by the computer to perform method steps for mapping disparate data objects from multiple data sources into a single, reusable software component accessible to a software application performed by a computer, for integrated access to the disparate data objects generated dynamically by or contained in multiple data sources stored in at least one electronic storage device coupled to the computer, the method comprising the following steps:

(a) for a software application, identifying data objects for mapping;

(b) employing an information integration software facility for connecting to data sources of the data objects and registering the data objects with the information integration software facility;

(c) using the information integration software facility for creating a single virtual data object consolidating multiple attributes from the registered data objects;

(d) for the software application, establishing a connection to the information integration software facility for referencing the virtual data object; and

(e) wrapping access to the virtual data object into a reusable software component accessible directly from the software application.

18. The method according to claim 17, wherein the information integration software facility having access to multiple data sources, being chosen from a group comprising databases, files and spreadsheets, containing or dynamically generating data from different hardware systems and possibly storing data in different formats.

1 19. The method according to claim 17, wherein the information integration software facility
2 being chosen from a group comprising a multi-database server, a federated data server and an
3 information integration server.

1 20. The method according to claim 17, wherein the software application accessing the
2 reusable software component within a single unit of work.

1 21. The method according to claim 17, wherein the virtual data object being mapped into an
2 entity bean having attributes spanning multiple data sources.

1 22. The method according to claim 21, wherein the entity bean being a container-managed
2 persistence entity bean.

1 23. The method according to claim 17, wherein the software application including an
2 Enterprise JavaBeans (EJB) application.

1 24. The method according to claim 17, wherein the virtual data object being accessed from a
2 group comprising Java servlets, Java Server Pages (JSPs) and Web Services.